

REMARKS

In the Office Action dated February 13, 2007, claims 1, 3-10, 12-20 and 22-24 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Katoh et al. (U.S. Patent No. 6,380,764; hereinafter “Katoh”) in view of Miyazaki, and claim 3 was objected to for lack of antecedent basis. Applicant respectfully traverses and requests reconsideration.

As an initial matter, Applicant notes that claims 3, 4 and 22 have been canceled above. As a result, Applicant notes that the objection to claim 3 is rendered moot.

Claims 1, 3-10, 12-20 and 22-24 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Katoh in view of Miyazaki. Katoh is generally directed to the problem common to integrated circuits of balancing the desire to have low threshold/high speed devices, but that have significant leakage current with the use of high threshold/low speed devices that offer significantly reduced leakage currents. (col. 2, lines 9-63) To address this situation, Katoh teaches the provision of multiple threshold switching devices (i.e., low and high threshold MOSFETs) such that signal paths having varying delays and varying levels of leakage current may be provided. (col. 3, lines 25-37) More significantly, Katoh teaches that such high and low threshold switching devices may be mixed so as to meet any necessary speed requirements (i.e., set maximum delays such that a minimum operation frequency is achieved) without needlessly incurring leakage currents by making *all* of the switching devices low threshold devices. (col. 3, lines 38-51) Given this capability to design signal paths using either or both of the low and high threshold devices, Katoh further discloses methods whereby circuits meeting desired switching speeds, but still maximizing any possible reduction in current leakage, may be obtained by selectively combining low and high threshold devices during the design phase of the circuit. (col. 4, line 48 – col. 5, line 9) Thus, Katoh is seen to provide a system wherein tradeoffs between switching speeds (or delays) and leakage current can be designed into a circuit with

greater precision, thereby maximizing the benefits of low and high threshold devices. In keeping with these teachings, Katoh is silent with regard to the possibility of dynamically controlling the supply/bias voltages to the multiple threshold devices.

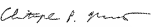
With this understanding, Applicant respectfully submits that one having ordinary skill in the art would not be motivated to combine the multiple threshold devices of Katoh with the control circuitry taught by Miyazaki because to do so would confound the very purpose of Katoh. That is, Katoh allows a circuit designer to very specifically specify the delays in any given signal path such that no more than the necessary amount of low threshold devices are used in combination with leakage current-reducing high threshold devices. As a result, one having ordinary skill in the art would *not* be motivated to adjust delay values using the control circuitry of Miyazaki because to do so would interfere with the desired speed versus leakage current balance provided during the circuit's design. Stated another way, a person of ordinary skill in the art would not combine the teachings of Miyazaki with those of Katoh because to do so would change the basic operating principle of Katoh. (See M.P.E.P. § 2143.01(VI): "If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious.")

For this reason, Applicant respectfully submits that the combination of Katoh in view of Miyazaki fails to establish a *prima facie* basis for the rejection of claims 1, 3-10, 12-20 and 22-24, which claims are seen to be in suitable condition for allowance.

Applicant respectfully submits that the claims are in condition for allowance and respectfully request that a timely Notice of Allowance be issued in this case. The Examiner is invited to contact the below listed attorney if the Examiner believes that a telephone conference will advance the prosecution of this application.

Respectfully submitted,

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By: 
Christopher P. Moreno
Registration No. 38,566

Vedder, Price, Kaufman & Kammholz, P.C.
222 North LaSalle Street, Suite 2600
Chicago, Illinois 60601
phone: (312) 609-7842
fax: (312) 609-5005